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COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION

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FINAL

AMENDMENTS TO REGULATIONS 310 CMR 7.00 FOR THE CONTROL OF AIR POLLUTION IN THE

BERKSHIRE AIR POLLUTION CONTROL DISTRICT
PIONEER VALLEY AIR POLLUTION CONTROL DISTRICT
MERRIMACK VALLEY AIR POLLUTION CONTROL DISTRICT
METROPOLITAN BOSTON AIR POLLUTION CONTROL DISTRICT
CENTRAL MASSACHUSETTS AIR POLLUTION CONTROL DISTRICT
SOUTHEASTERN MASSACHUSETTS AIR POLLUTION CONTROL DISTRICT

STATUTORY AUTHORITY M.G.L. c. 111, Sections 142A through 142N

December 2007

AMEND 310 CMR 7.00, the list of cities and towns to reflect the regional boundary changes:

City/Town	Region	District
Athol	\mathbf{W}	CM
Braintree	S	MB
Canton	S	MB
Cohasset	S	MB
Franklin	C	SM
Hardwick	\mathbf{W}	CM
Hingham	S	MB
Holbrook	S	MB
Hull	S	MB
Medfield	C	MB
Millis	C	MB
Norfolk	C	MB
Norwood	S	MB
Petersham	\mathbf{W}	CM
Randolph	S	MB
Royalston	\mathbf{W}	CM
Tyngsborough	N	MV
Walpole	S	MB
Warren	\mathbf{W}	CM
Westford	N	MV
Weymouth	S	MB

AMEND 7.02(2)(b)33. to correct a typo

- 33. Actions that Contravene an Issued Plan Approval. Except as provided in 310 CMR 7.02(2)(b)33a. and b., the construction, substantial reconstruction, or alteration of a facility or emission unit that would contravene an issued plan approval does not require a new plan approval, provided that the planned construction, substantial reconstruction, or alteration does not increase potential emissions by one ton per year or more above the emission limitation established by the issued plan approval. Persons constructing, substantially reconstructing or altering a facility or emission unit as allowed by this exemption shall notify the Department within 30 days of any such action. In order to determine applicability under 310 CMR 7.02(2)(b)33., emissions shall be calculated based on the increase in potential emissions (as defined in 310 CMR 7.00) of the planned action. Reductions in emissions resulting from reduced utilization or elimination of, emission units cannot be deducted. Products of combustion from any fuel utilization facility and emissions from an emission unit(s) installed in compliance with 310 CMR 7.03 are not included when calculating an increase in potential emissions.
 - a. Notwithstanding the provisions of 310 CMR 7.02(2)(b)33., the provisions of...

AMEND 310 CMR 7.02(2)(e) to be consistent with the typo correction to 7.02(2)(b)33. (e) Reporting.

1. The owner or operator of a facility subject to the Source Registration reporting requirements of 310 CMR 7.12, shall report the construction, substantial reconstruction or alteration activities that qualified for exemption in the next required Source Registration. Quantification of emissions from exempt activities is not required unless specifically requested.

2. The owner or operator of a facility required to report under 310 CMR 7.02(2)(b)33.

AMEND 310 CMR 7.02(8)(c), (d), (e) and (h)

(8) Emission Limitations.

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- (c) Emission Limitations for Existing Facilities. Existing facilities must comply with the applicable requirements of 310 CMR 7.02(8)(d) through (g) unless subject to more stringent requirements that have been established by plan approval, state regulation or federal requirement (NSPS or NESHAP) as applicable. Under 310 CMR 7.02(8)(c) through(g), an existing facility is any facility or emission unit that was in operation on or before June 1, 1972 and has not been constructed, substantially reconstructed or altered since that date (See also Definition of Existing Facility in 310 CMR 7.00). Stationary combustion turbines and stationary reciprocating engines are not subject to the Emission limits in *Tables 4*, 5 and 6.
- (d) <u>Maximum Particulate Emission Limits in Areas of Critical Concern</u>. Existing facilities in the communities listed in 310 CMR 7.02: *Table 3* shall, at a minimum, meet the particulate emission limits in Table 4 unless subject to a more stringent emission limit in a plan approval, state regulation or federal program (*e.g.* NSPS or NESHAP), as applicable. Stationary combustion turbines and stationary reciprocating engines are not subject to the Emission limits in *Tables 4*, 5 and 6.
- (e) <u>Maximum Particulate Emission Rate:</u> All Other Communities. In communities other than those listed in 310 CMR 7.02: *Table 3*, existing facilities shall, at minimum, meet the particulate emission limits in 310 CMR 7.02: *Table 5* unless subject to more stringent emission limits as applicable in a plan approval, state regulation or federal program (NSPS or NESHAP). Stationary combustion turbines and stationary reciprocating engines are not subject to the Emission limits in *Tables 4*, 5 and 6.

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(h) <u>Particulate Emission Limitations for New Wood and Fossil Fuel Utilization Facilities.</u> New facilities shall, at a minimum, comply with the particulate emission limits in 310 CMR 7.02: *Table 6* unless subject to more stringent emission limits as applicable in a plan approval, state regulation or federal program (NSPS or NESHAP). Stationary combustion turbines and stationary reciprocating engines are not subject to the Emission limits in Table 4, 5 and 6.

AMEND: 310 CMR 7.03(15)(a)

- (15) Non-heatset Offset Lithographic Printing. On or after July 1, 1992 construction, substantial reconstruction or alteration of any non-heatset offset lithographic printing press, except such presses present at a facility subject to 310 CMR7.26 (20), utilizing materials containing VOCs or organic material, including but not limited to, printing inks, overprint coatings, makeup solvents, fountain solution additives, alcohol and cleanup solutions, complying with the applicable performance standards set forth in 310 CMR 7.03(15)(b) and (15)(c), shall be subject to the requirements in either 310 CMR 7.03(15)(a)1 or (a)2 below.
 - (a) 1. The total facility, including the new or modified printing press, shall use less than 670 gallons per month of all materials containing VOCs, or alternatively, its emission rate shall be less than 2.5 tons of VOC per calendar month. This emission rate shall include emissions from all printing and non-printing operations at the facility, including, but not limited to, non-heatset offset lithographic printing presses. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.

2. The total facility, including the new or modified printing press, shall use less than 2,000 gallons per 12-month rolling period of all materials containing organic material (includes VOC), or, alternatively, shall emit less than 10 tons of organic material (includes VOC), per 12-month rolling period. This emission rate shall include emissions from all printing and non-printing operations at the facility, including, but not limited to, non-heatset offset lithographic printing presses. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

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AMEND 310 CMR 7.03(16)(a):

- (16) <u>Paint Spray Booths.</u> Construction, substantial reconstruction or alteration of any paint spray booth utilizing coatings, thinners, reducers and cleanup solutions, and complying with the applicable performance standard of 310 CMR 7.03(16)(b)1 shall be subject to the requirements in either 310 CMR 7.03(16)(a)1 or (a)2 below ..
 - (a) 1. The total facility, including the new or modified paint spray booth, shall use less than 670 gallons per calendar month of all materials containing VOCs, or alternatively, has an emission rate of less than 2.5 tons of VOC per calendar month. This emission rate includes all coating operations at the facility. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.
 - 2. The total facility, including the new or modified paint spray booth, shall use less than 2,000 gallons per 12-month rolling period of any material containing organic material (includes VOC), or alternatively, has an emission rate less than 10 tons of organic material (includes VOC) per 12-month rolling period. This emission rate includes all coating operations at the facility. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

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AMEND 310 CMR 7.03(19), 7.03(19)(a)1 and 2

- (19) <u>Flexographic, Gravure, Letterpress and Screen Printing</u>. On and after May 1, 1998, construction, substantial reconstruction, or alteration of any flexographic, gravure, letterpress, or screen printing press at a facility not subject to 310 CMR 7.26(20) through (29), utilizing materials containing VOCs or organic material, including but not limited to, printing inks and overprint coating, alcohol, makeup solvents, and cleanup solutions complying with the applicable performance standards in 310 CMR 7.26(25) and 310 CMR 7.26(26) shall be subject to the requirements in either 310 CMR 7.03(19)(a)1 or (a)2 below.
 - (a) 1. The total facility, including the new or modified printing press, and non-printing operations at the facility—shall use less than 670 gallons per calendar month of all materials containing VOCs or, alternatively, its emission rate shall be less than 2.5 tons of VOC per calendar month. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.
 - 2. The total facility, including the new or modified printing press, and non-printing operations at the facility, shall use less than 2,000 gallons per 12-month rolling period of all materials containing organic material (includes VOC) or alternatively, its emission rate shall be less than 10 tons of organic material (includes VOC) per 12-month rolling period. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

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AMEND 310 CMR 7.03(25)(b) 1

(25) Biotechnology Surface Disinfection Processes.

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- (b) Surface disinfection processes shall comply with the following criteria:
 - 1. The total facility-wide actual emissions, including new or modified surface disinfection processes, shall comply with the requirements in either 310 CMR 7.03(25)(b)1.a. or 1.b.
 - a. 15 tons of volatile organic compounds (VOC) per 12-month rolling period. This VOC emission limitation includes all process operations at the facility. In addition, facility-wide actual emissions of VOC shall not exceed 2.5 tons per calendar month. The owner/operator is subject to the reporting requirements of 310 CMR 7.12.
 - b. Less than ten tons of materials containing organic material (includes VOC) per 12-month rolling period. This organic material emission limitation includes all process operations at the facility. The owner/operator is not subject to the reporting requirements of 310 CMR 7.12 unless otherwise required.

AMEND 310 CMR 7.04(4)

(4) <u>U Inspection</u>, <u>Maintenance and Testing</u>.

(a) On and after December 31, 1977, no person shall cause, suffer, allow, or permit the operation of any fossil fuel utilization facility rated by the Department as having an energy input capacity equal to or greater than 3,000,000 Btu per hour unless said facility has been inspected and maintained in accordance with the manufacturers recommendations and tested for efficient operation at least once in each calendar year. The results of said inspection, maintenance, and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the facility. Unless otherwise required, 310 CMR 7.04(4)(a) shall not apply to stationary combustion turbines and stationary reciprocating engines.

AMEND 310 CMR 7.12(1)(a) and (b)

7.12: U Source Registration

(1) Applicability.

(a) Source Registration is required of any person owning, operating or controlling a facility if said facility:

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7. Is required to file Source Registration as a condition of a plan approval or operates under a Restricted Emission Status (RES) pursuant to 310 CMR 7.02(9) or 7.02(10) issued since January 1, 1990. The owner/operator of a facility required by a plan approval, issued prior to January 1, 1990, to submit annual source registration is no longer required to do so unless said facility meets one of the other conditions for registration in 310 CMR 7.12; or a more recent Department approval requires Source Registration;

- 8. Who receives a request for Source Registration from the Department; or
- 9. Any person owning, operating or controlling a facility subject to 310 CMR 7.00: *Appendix C*.
- (b) Any person owning, operating or controlling a facility that becomes subject to reporting by meeting one of the criteria in 310 CMR 7.12(1)(a) and that was not previously subject to Source Registration reporting shall contact the Department by January 31.

AMEND 310 CMR 7.12(2)(a).

(2) Schedule.

- (a) By April 15 of each year, Source Registration shall be signed and submitted to the Department by the Responsible Official of:
 - 1. A facility required to obtain an operating permit pursuant to 310 CMR 7.00: *Appendix C*;
 - 2. A facility having a RES pursuant to 310 CMR 7.02(9);
 - 3. [RESERVE]
 - 4. A facility with actual emissions of NO_x or VOC equal to or greater than 25 tons per year:
 - 5. A facility that emits an air contaminant subject to a NESHAP or a Maximum Achievable Control Technology (MACT) standard defined at 40 CFR Part 61 and Part 63, for which the Department has received delegation from EPA; or
 - 6. A facility that is required, as a condition of a plan approval issued since January 1, 1990, to file Source Registration annually.

ADD: 7.20 [RESERVED]

AMEND 310 CMR 7.26(30)-(36)

- (30) <u>U Boilers Applicability</u>. Except as provided in 310 CMR 7.26(30)(a) and (b), the provisions of 310 CMR 7.26(30) through (37) apply to any person who owns or operates a boiler installed on or after September 14, 2001, with a heat input rating equal to or greater than 10,000,000 Btu per hour but less than 40,000,000 Btu per hour. Complying with the criteria in 310 CMR 7.26(30) through (37) does not relieve the owner or operator from his or her applicability to the requirements of 40 CFR 60 Subpart Dc Standards of Performance for Small Industrial Commercial Steam Generating Units or 40 CFR 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.
 - (a) The provisions of 310 CMR 7.26(30) through (37) do not apply to any person who is an owner or operator of a facility:
 - 1. who has secured an operating permit pursuant to 310 CMR 7.00: *Appendix C*.; however, 310 CMR 7.02(4) or (5) do apply;
 - 2. who proposes to install a wood fuel-fired boiler with a heat input rating equal to or greater than 10,000,000 Btu per hour but less than 40,000,000 Btu per hour; however, 310 CMR 7.02(5) does apply; or
 - 3. who installs a temporary boiler in accordance with 310 CMR 7.03(23).

- (b) If the installation of the boiler(s) causes the facility to be subject to 310 CMR 7.00: *Appendix C*, or to exceed an emission cap contained in a written Department approval, or notification pursuant to 310 CMR 7.02(11), the person who is an owner or operator of the facility shall, as applicable:
 - 1. file either a Limited Plan Application pursuant to 310 CMR 7.02(4) or Comprehensive Plan Application pursuant to 310 CMR 7.02(5) to increase the facility-wide cap or to establish an emission cap to avoid applicability to Non-Attainment Review at 310 CMR 7.00: *Appendix A*, Operating Permit and Compliance Program at 310 CMR 7.00: *Appendix C* or federal PSD (40 CFR 52.21); or
 - 2. comply with 310 CMR 7.26(30)-(37) and comply with the requirements of Non-Attainment Review at 310 CMR 7.00: *Appendix A*, the Operating Permit and Compliance Program at 310 CMR 7.00: *Appendix C* and federal PSD (40 CFR 52.21) as applicable; or
 - 3. comply with 310 CMR 7.26(30)-(37) and submit a notification establishing an emission cap under 310 CMR 7.02(11), or a higher emissions cap under 310 CMR 7.02(11) where the installation would otherwise violate an emissions cap pursuant to 310 CMR 7.02(11); or
 - 4. comply with 310 CMR 7.26(30)-(37) and comply with the requirements of 310 CMR 7.02(10)Modification of a Restricted Emission Status (RES).
- (c) Any person who is the owner/operator of a boiler installed in accordance with 310 CMR 7.26(30) shall continue to comply with 310 CMR 7.26(31) and (33) through (37) even if the facility later becomes subject to 310 CMR 7.00: *Appendix C*.
- (31) <u>Definitions</u>. Terms used in 310 CMR 7.26(30)-(37) are defined in 310 CMR 7.00 or in 310 CMR 7.26(31). Where a term is defined in both 310 CMR 7.00 and in 310 CMR 7.26(31), the definition in 310 CMR 7.26(31) is applicable.

<u>DISTILLATE FUEL OIL</u> for the purposes of 310 CMR 7.26(30) means fuel oil that complies with the specifications for fuel oil numbers 1 or 2 as defined by the American Society for Testing and Materials in ASTM D396-98, "Standard Specification for Fuel Oil" dated September 1998 and has a sulfur content not to exceed 0.05% by weight or D6751 for bio-diesel and has a sulfur content not to exceed 0.0015% by weight.

<u>ULTRA-LOW SULFUR DISTILLATE FUEL OIL (ULSD)</u> means any fuel oil or other fuel, excluding used oil fuel and hazardous waste fuel, which complies with the applicable U.S. Environmental Protection Agency sulfur limits for fuel pursuant to 40 CFR 80.29, 40 CFR 80.500, and 40 CFR 80.520(a) and (b) as in effect on January 18, 2001 and either complies with the specifications for fuel oil numbers 1 or 2 as defined by the American Society for Testing and Materials (ASTM) in ASTM D-396-98 or D6751 for bio-diesel.

(32) Certification.

(a) An owner or operator of a boiler subject to 310 CMR 7.26(30) shall submit to the Department an initial compliance certification form within 60 days of the date on which the boiler commences operation .

- (b) Effective December 28, 2007, prior to installation and operation, a person who is an owner or operator of a boiler subject to 310 CMR 7.26(30) shall certify to the Department, in compliance with 310 CMR 70.00, that the boiler is in compliance with 310 CMR 7.26(30) through (37).
- (33) Fuel of Use/Emission Limitations.
- (a) Fuel of Use -
 - 1. Only natural gas and distillate fuel oil(s) may be used, as specified in 310 CMR 7.26(33)(a)2. through (a)4. Used oil fuel and Hazardous Waste Fuel as defined under 310 CMR 30.000 cannot be burned in boilers subject to 310 CMR 7.26(30).
 - 2. NATURAL GAS Prior to July 1, 2009:
 - a. a boiler subject to 310 CMR 7.26(30) shall burn natural gas as the primary fuel of use where the boiler is located on a property adjacent to a street or sidewalk underlain by a natural gas pipeline having sufficient pressure and capacity to supply natural gas to the boiler.
 - b. a natural gas fired boiler may burn distillate fuel oil for a maximum of 180 days per calendar year. Total annual distillate fuel use (gallons/year) is calculated by multiplying 90 days/yr x 24 hours/day x maximum firing rate (gals/hour) per boiler. Records must be established and maintained up to date in accordance with 310 CMR 7.26(36) Recordkeeping and Reporting.
 - c. on and after July 1, 2009, there is no restriction on the gallons of distillate fuel oil burned in a dual fuel fired boiler subject to 310 CMR 7.26(30)-(37).
 - 3. <u>DISTILLATE</u> Prior to July 1, 2009, a boiler subject to 310 CMR 7.26(30) may burn distillate fuel oil as the primary fuel of use when conditions for natural gas use, as specified in 310 CMR 7.26(33)(a)2, cannot reasonably be met.
 - 4. On and after July 1, 2009, there is no restriction on the gallons of distillate fuel oil burned in a boiler subject to 310 CMR 7.26(30)-(37). The owner or operator of a boiler subject to 310 CMR 7.26(30) shall accept for delivery only natural gas or ultralow sulfur distillate fuel oil.
 - 5. On and after July 1, 2009, an owner or operator of a boiler subject to 310 CMR 7.26(30) shall accept for delivery only natural gas or ultra-low sulfur distillate fuel oil.
- (b) Emission Limitations. Each boiler shall comply with the following emission limitations in pounds per million Btu heat input for the fuel of use.

POLLUTANT	Fuel of Use	Emission limitation (lbs. per million Btu)
Nitrogen Oxides	Natural Gas	0.0350
	Distillate and	0.150
	Ultra-low Sulfur Distillate	
	Fuel Oil	
Particulate Matter	Natural Gas	0.010
	Distillate and	0.020
	Ultra-low Sulfur Distillate	
	Fuel Oil	
Carbon Monoxide	Natural Gas	0.080

Distillate and 0.080 Ultra-low Sulfur Distillate Fuel Oil Volatile Organic **Natural Gas** 0.030 Compounds Distillate and 0.030 Ultra-low Sulfur Distillate

Fuel Oil

(c) The sulfur dioxide emissions are limited by the sulfur content of the distillate fuel oil. The sulfur content of the distillate fuel oil is limited to 0.05% by weight and the sulfur content of the ULSD fuel oil is limited to 0.0015% by weight.

(34) Operational Requirements.

- (a) The boiler and appurtenances shall be operated in accordance with the manufacturer's standard operating and maintenance procedures.
- (b) A boiler tune-up shall be performed annually.

(35) Stack Requirements.

(a) Minimum stack height shall be 1.5 times the height of the building on which the stack is located. If the stack height is (1) lower than 1.5 times the building height or (2) lower than the height of an adjacent structure, an EPA Guideline air quality model shall be run to document that the operation of the applicable boiler(s) will not cause National Ambient Air Quality Standards exceedance. The air quality model documentation must be retained on site for as long as the boiler(s) are operational. ...

(36) Recordkeeping and Reporting

(e) The person who is the owner or operator of an applicable boiler is subject to the reporting requirements of 310 CMR 7.12 U Source Registration.